The Spectrum Monitor®

Amateur, Shortwave, AM/FM/TV, WiFi, Scanning, Satellites, Vintage Radio and More

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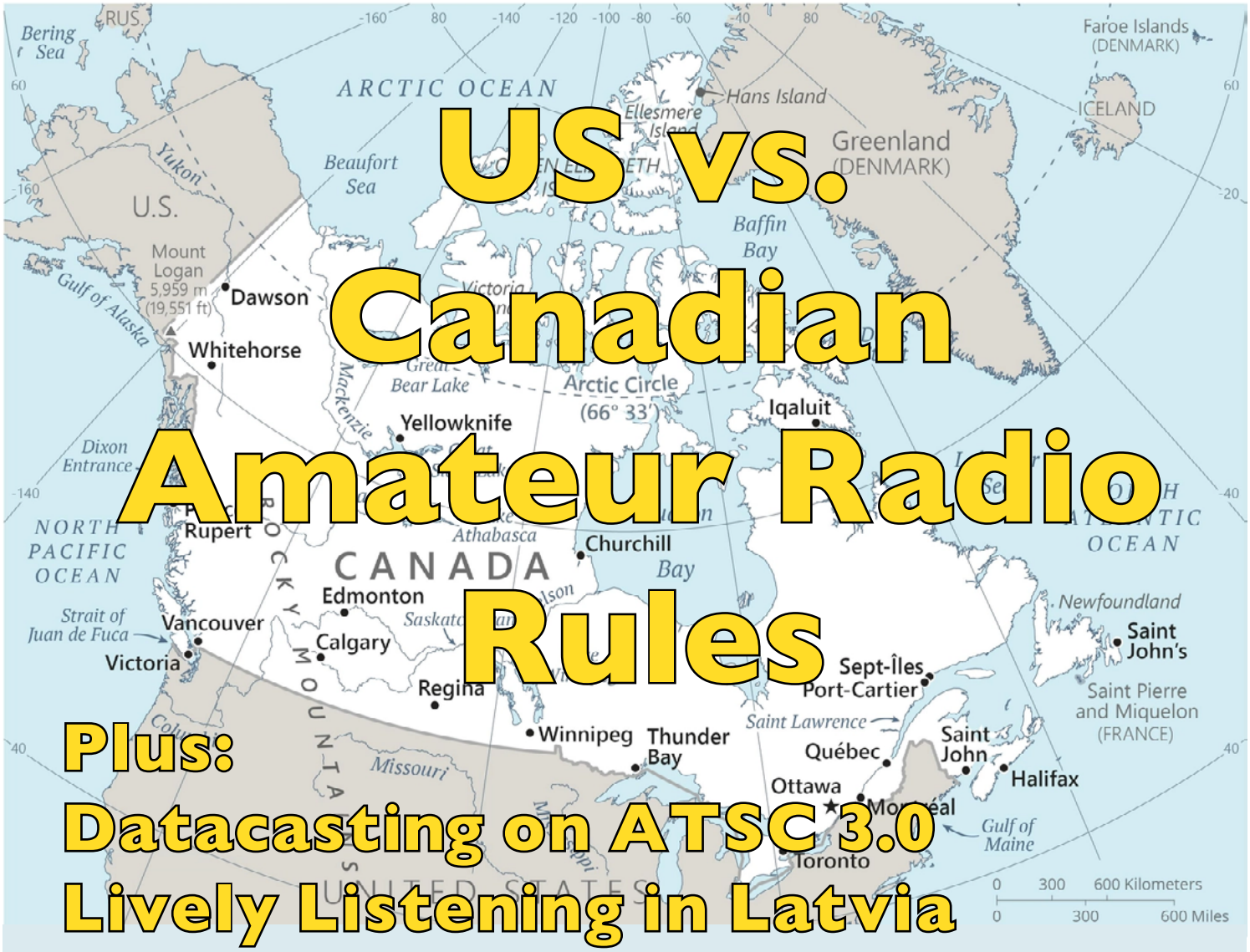

US vs. Canadian Amateur Radio Rules

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Datacasting on ATSC 3.0

Lively Listening in Latvia

Two Vertical Antenna Kits

The MFJ Enterprises Story

Icom IC-R 15, AOR AR-DV 10 & Stampfl Waveblock Preselector

Map of Canada. (Courtesy: CIA)

A TSM Closer Look:

US vs. Canadian Amateur Radio Licensing Systems

By Keith Baker KB1SF / VA3KSF

I've been a licensed radio amateur since 1976. My Novice license was granted in the United States in December of that year. I've remained a US licensee ever since and currently hold the US Extra Class License. In addition, when I permanently moved to Canada (when I married a lovely Canadian lady!) I was granted my first Canadian amateur radio license in that country in 2004.

I currently hold a Canadian Advanced Certificate with a Morse Code Endorsement. Since becoming a Canadian amateur I've also become an accredited volunteer examiner in both countries… work that has provided me with a unique perspective on the similarities (and, in some cases the glaring differences) in the amateur radio licensing systems between our two countries.

In this article, I'll compare and contrast the basic regulatory underpinnings of each country's amateur licensing systems. I'll explore some of the possible reasons why the regulations in each county are as they are and why some of those regulations and examining systems (particularly in the United States) may be long overdue for changes. But first, let's explore why there is even a need for radio amateurs to be licensed.

Why Are Radio Amateurs Licensed?

In short, it's because radio waves travel internationally. As a result, there needs to be some international control and coordination of the radio spectrum or else absolute mayhem on the worldwide airwaves would prevail. Administrations (countries) have created an organization called the International Telecommunications Union (ITU)—which comes under the auspices of the United Nations, in fact, it's the oldest

UN agency—to decide, by member vote regarding mutually agreed upon treaties, i.e., "what goes where" in the international radio spectrum.

The ITU has also created the International Amateur Radio Union (IARU) that is, by their definition, "a radiocommunication service in which radio apparatus are used for the purpose of self-training, intercommunication or technical investigation by individuals who are interested in radio technique solely with a personal aim and without pecuniary interest." (**https://www.iaru.org/amateur-radio**). Keep that very simple definition in mind as I'll frequently refer to it.

And while the ITU leaves it up to each administration (country) as to how users in the Amateur Radio Service are to be both examined and/or licensed, all current ITU member countries in the world require some form of both in order for persons to use the international spectrum allotted to the Amateur Radio Service.

The ITU Rulebook

Unfortunately, far too many US amateurs mistakenly believe that the Federal Communications Commissions rules (outlined in excruciating detail in our FCC Part 97) apply to all other radio amateurs on the planet. Nothing could be further from the truth! In reality, it's actually the other way around. Because the USA is a signatory to the treaties that establish and govern the ITU, the rules in Part 97 should only reflect (or simply amplify) the basis and intent of those rules and regulations set about for our service internationally and not the other way around.

What's more, internationally, the ITU rules governing our service are refreshingly simple. They revolve primarily around amateur radio communications between third parties and/or countries and that those communications must be non-commercial and not encoded in any way (except for downlink telemetry and control of our amateur radio satellites). They also stipulate that amateurs need to be examined and licensed (but not how that examining and licensing is to be done) and whether (or not) amateurs need to be examined on sending and receiving in Morse code. And finally, there are words pertaining to the amateur's role in disaster relief. And that's pretty much it!

Well, not quite. The ITU also lays out a set of what are called "Minimum Qualifications of Radio Amateurs" in its ITU-R M.1544-1 (dated 09/15) (**https://www.itu.int/rec/R-REC-M.1544-1-201509-I/en**). This document specifies that any person seeking a license to operate in our service should demonstrate a "theoretical knowledge" of such things as the international and domestic radio regulations, methods of communication (not proficiency!) including radiotelephony, radiotelegraphy, data and imaging. They also outline that licensees in our service should possess a minimum knowledge of radio system theory to include transmitters, receivers, antennas, propagation and measurements. These qualifications also include a brief mention of radio emission safety, operating procedures, electromagnetic compatibility along with avoidance and resolution of radio frequency interference.

It's important to note here that the ITU only specifies the "what" and not the "how," the "how-to" or to what proficiency level examinations for a license in our service are to be conducted. In that sense, they leave it up to each individual administration (country) to simply make sure their examination systems cover these minimum requirements. But the basic ITU definition also very clearly requires that ours is to be a strictly non-commercial radio service for "persons interested in radio technique solely with a personal aim." Once again, keep that latter phrase in mind as I elaborate on some of the differences between our licensing systems in the USA and Canada.

The USA's Voluminous Part 97

Back in the late 1950s and early 1960s when AM phone and Morse code (CW) were the main forms of amateur radio communication, the USA's American Radio Relay League (ARRL) was concerned that our bands would soon become so overcrowded that mayhem would soon ensue. Clearly, they believed, something had to be done to mitigate this looming problem.

Up until the early 1950s, most US amateur radio operators shared the same privileges. With the exception of Novice and Technician licensees, all US hams (General, Advanced, and Extra Class) could operate on the same frequencies with any emission mode they wished. So, the ARRL petitioned the USA's Federal Communications Commission (FCC) to both "toughen up" the exams for US licensing and to somehow create a way to segregate "what went where" on our bands so as to help alleviate the mayhem.

At about the same time, the launch of the world's first orbiting satellite (Sputnik) by the Soviet Union had become a wake-up call for the United States as a perceived "missile gap" was developing between the two countries. The US government soon started searching for a way…any way… to speed up the education and training of scientists and engineers in the United States to help address this perceived shortfall of its scientists and engineers.

Coincidentally, at about the same time, the ARRL's petition to the FCC for better training of US hams had also been submitted and soon morphed into the absolute, perfect vehicle for the FCC to help implement their new US government mandate. The end result was that the FCC completely revised the US amateur radio licensing system to create a series of "incentives" for US hams to expand their technical prowess and to help create a pool of trained scientists, technicians and engineers.

In other words, the ARRL's petition became a classic case of "be careful what you wish for because you just might get it." The result included sweeping changes and additions to both the basis and purpose of our service in the USA's Part 97. The FCC also built in a series of incentives for amateurs to increase their technical and operational knowledge so

as to codify these incentives into regulation. The new rules granted more operating privileges (and the use of so-called "exclusive" frequency spectrum) to those who complied with their rules.

The Birth of Incentive Licensing

Thus, the concept of the USA's "incentive licensing" system was born. Indeed, even though it's now been more than a half-century (and most of the supposed "bad guys" in the ARRL and FCC that perpetrated these changes are long since dead) a lot of resentment and controversy over these changes remains to this day. That's probably because many hams actually lost some of their operating privileges with the FCC's incentive licensing scheme back then as they had to pass yet more tests to get their previously granted privileges back.

The first phase of incentive licensing in the USA took place in November 1968. The new rules had been announced for some time in advance and many hams had used that time to upgrade to Advanced or Extra Class. For those who hadn't however, some of their privileges were taken away from them in 1968. And on November 23, 1969, the second phase of incentive licensing took effect and essentially remains in place in Part 97 (with just a very few non-substantive changes) to this day.

In essence, in 1968, the licensing system in the United States was fundamentally changed from simply measuring one's competence in insuring safe and non-interfering operation on our bands (as the ITU stipulates in its "minimum requirements" documents) into an achievement-based licensing system…complete with built in incentives to increase one's overall knowledge of radiocommunication theory and practice and using a series of "diplomas" along with access to expanded frequency spectrum as rewards.

The Canadian Regulatory System

By contrast, in Canada, there is no direct equivalent to the USA's Part 97. Instead, Canada's amateur radio operators are regulated by what's called Regulations by Reference and Radio Information Circulars. These are simply written extracts from Canada's overall Radio Regulations that pertain specifically to amateur radio. As a result, the excruciating detail of a Part 97-type regulatory scheme is absolutely absent in the way Canadian radio amateurs are both regulated and licensed.

The government of Canada has also placed a lot of this regulatory and "getting started" information about our service in Canada on a single government website (**https://ised-isde.canada.ca/site/spectrum-management-telecommunications/en/spectrum-allocation/amateur-radio-service**). The site contains links to not only these Regulations by Reference and Radio Information Circulars, but it also contains links to the various Canadian question pools.

In addition, the site includes links to exam generators

Industry Canada Industrie Canada

Certificate of Proficiency in Amateur Radio

This is to certify that

Keith C. Baker

has obtained the following qualifications:

Basic
Morse Code
Advanced

The certificate holder is authorized to operate amateur radio apparatus in accordance with the regulations made pursuant to the *Radiocommunication Act*, and to use the following call signs:

VA3KSF VA3OB

Certificate Number:
Issue date:

Issued by Gerry Bonnefoy

Canada

Canadian Amateur Radio Operators are issued "Certificates of Proficiency" versus being "licensed." And, yes, Canadian hams can hold more than one call sign and also have an endorsement for successfully completing a Morse code examination and have it shown on their Certificates. (Courtesy: Author)

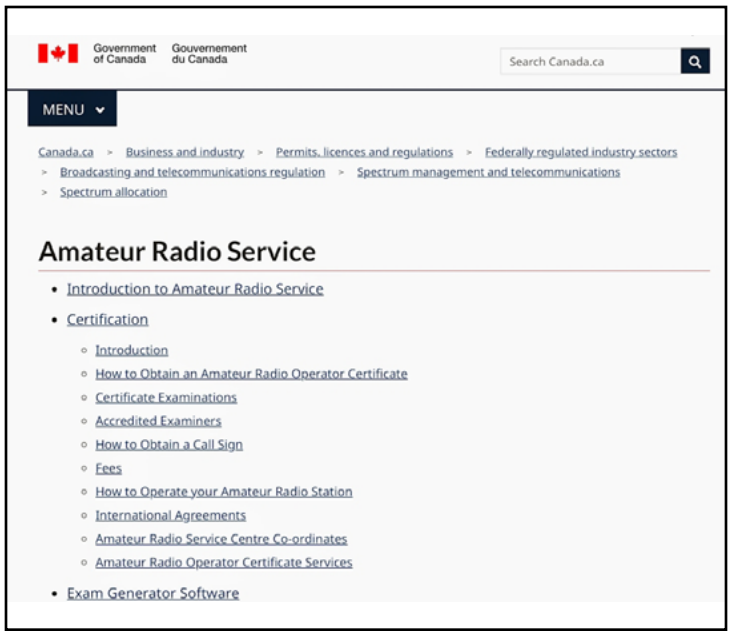
that applicants can use to gauge their readiness to take their various level exams. These exam generators are also what we Accredited Examiners use to generate and download (to our home computer printers) an officially certified exam that we can then administer to one of our applicants. Besides the printed test questions, the software generates a blank answer sheet as well as a filled-in answer sheet for our use in grading these exams.

What's more, even a cursory reading of the Canadian rules will highlight just how refreshingly simple it is to both license and regulate Canadian hams. For example, all the USA's sub-band (and sub-sub-band) operating restrictions based on license class and operating mode are completely absent from the Canadian rules. That is, on HF (and with a few exceptions, on 30 meters, for example) as long as whatever emission mode one is using occupies 6 kHz or less of bandwidth (the ITU-based maximum), Canadian Hams are free to use that mode anywhere on our HF bands.

This is also why US hams may occasionally hear Canadian Single Sideband (SSB) HF nets operating in what in the USA are frequencies restricted to Morse code (CW) or digital emissions. It is perfectly legal for Canadians to be there and to do that under the Canadian rules for our service. However, it's also against the US Part 97 rules for US hams to come up on those frequencies and tell Canadians (in SSB) that, "you can't be here." In reality (and based on Part 97) it's US hams who "can't be there" emitting SSB in that portion of their US-regulated sub-bands!

The Canadian Qualifications

Briefly, authority to operate radio apparatus in the Amateur Radio Service in Canada, using a Canadian call sign issued by Innovation Science and Economic Development


Government of Canada
Gouvernement du Canada
Search Canada.ca
MENU
Canada.ca > Business and industry > Permits, licences and regulations > Federally regulated industry sectors > Broadcasting and telecommunications regulation > Spectrum management and telecommunications > Spectrum allocation
Amateur Radio Service
Introduction to Amateur Radio Service
Certification
Introduction
How to Obtain an Amateur Radio Operator Certificate
Certificate Examinations
Accredited Examiners
How to Obtain a Call Sign
Fees
How to Operate your Amateur Radio Station
International Agreements
Amateur Radio Service Centre Co-ordinates
Amateur Radio Operator Certificate Services
Exam Generator Software

Innovation Science and Economic Development Canada (ISED)'s Web site contains a wealth of information regarding how the Amateur Radio Service is regulated in Canada, including a link to various examination generators. (Courtesy: ISED)

Canada (ISED), is given to holders of an Amateur Radio Operator Certificate with Basic Qualification. Other qualifications available with the Basic Amateur Radio Operator Certificate are the Morse code and Advanced Qualifications. Also, because the actual licensing documents are called "Certificates of Proficiency in Amateur Radio," once applicants achieve these various qualifications, they are then "certified" to operate in the Amateur Radio Service in Canada, rather than simply being "licensed." This subtle difference in semantics sets Canadian radio amateurs apart from the rest of their licensed brethren elsewhere in the world.

In years past amateur radio operators in Canada were also issued two separate authorizations; An Amateur Radio Operator Certificate and a radio station license that included a Canadian call sign. The Amateur Radio Operator Certificate was issued for life and had no fee associated with it, while the radio station license was issued on a yearly basis and a license renewal fee was charged.

However, on April 1, 2000, Industry Canada (as it was known back then) combined these documents into one authorization, the Amateur Radio Operator Certificate with its various qualifications. The current Amateur Radio Operator Certificate is now issued for life and has no fee associated with it. And, although it's no longer necessary for amateurs to renew their Certificates of Proficiency annually, they are still required to inform ISED Canada within 30 days of any change in their postal mailing address.

Basic Qualification

Obtaining a minimum passing score (70%) on this examination gives Canadian amateurs most operating privileges above 30 MHz with a 250-watt power limit. This closed book, 100-question, multiple choice, written examination is usually taken first, as it must be successfully completed in order to obtain a Canadian call sign. The test covers mostly rules and regulations and some very basic electronic and radio theory and is roughly equivalent in scope to the USA's combined exams for Technician and General class.

In July 2005, operating privileges in the HF bands (below 30 MHz) with a 250-watt power limit were also granted with this qualification alone if it was obtained prior to April 2, 2002 or, if the exam was taken after April 2, 2002, by achieving (or having proof of) an "Honors" score (80% or greater) on that exam.

Amateurs who meet the latter criteria are granted the same operator privileges as the holder of an Amateur Radio Operator Certificate with Basic Honors Qualification if they can demonstrate that they attained a mark of 80% or above on their Basic examination.

Morse Code Qualification

Yes, in Canada, you can still take a test for Morse code and, if successfully completed, have that qualification show up on your Certificate! This 5 WPM, sending and receiving exam can be taken after passing the Basic exam. Having the Basic plus the Morse code qualification gives additional privileges below 30 MHz (essentially all of the HF frequencies) with a 250-watt power limit and a few other minor restrictions (see below) that are reserved for Advanced Qualification holders.

Advanced Qualification

This closed book, 50-question, written theory exam is more technical than the Basic exam and can also be taken once one passes the Basic test. Having the Basic plus Advanced qualification gives all operating privileges currently authorized to radio amateurs in Canada, including the authority to build and operate a homebrew transmitter, use more transmitting power (up to the full international legal limit), give amateur radio examinations to others (you must also have the 5 WPM Morse Certification to give exams), control stations remotely, be the sponsor of an in-band repeater or a club station.

Lots of Licensing Options

Essentially, this means that, unlike in years past when successful completion of a Morse examination was absolutely required for access to our coveted high frequency (HF) radio bands in both the USA and Canada, once that requirement was removed internationally, ISED Canada decided to provide applicants for an Amateur Radio Certificate with a couple of different ways for them to achieve those same operating privileges while still offering a Morse endorsement as an option.

For example, one can garner slightly limited HF oper-

ating privileges simply by achieving a higher passing mark (80%) on just the Basic exam alone. Or one can obtain a minimum (70%) passing mark on that same (Basic) exam PLUS successfully completing the Morse exam to obtain those same privileges. Additionally, one can obtain full amateur privileges by achieving at least a 70% mark on BOTH the Basic written AND the Advanced written exams...once again...all without successfully completing a Morse exam.

The bottom line here is that if learning the Morse code isn't one's "thing" at the moment, they can still get in on the fun of worldwide HF communication via amateur radio in Canada simply by doing a bit more up-front, "book learning" for the Basic and/or Advanced written exams. And a Morse code endorsement can always be added to their Certificates by taking a test for it later. In addition, if the first time around, an applicant only obtained a 70% mark on the Basic exam, successfully completing another Basic exam with an 80% score or above one can achieve a "Basic with Honours" certificate giving them access to those (currently) coveted HF frequencies.

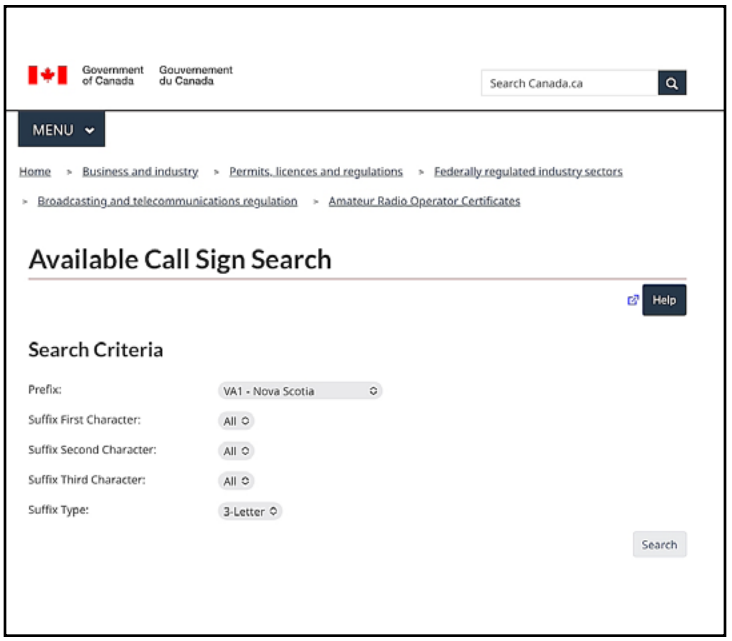
Requesting a Call Sign

Canada is also one of the few industrialized countries in the world that still encourages applicants for an initial amateur radio license to request their choice of call sign without additional charge. Candidate call signs can be selected from a list of those available as shown in the Canadian Amateur Radio Available Call Sign Search Engine on the internet. At some point, successful applicants will be asked to indicate their first, second and third choice(s) of call signs to ISED Canada. And, unless one's first choice of an initial call sign has already been assigned, it will most often be granted to the requesting applicant.

Canadian Accredited Examiners

In Canada, while one can take their examinations from an ISED official at a Canadian Government office, most amateur radio examinations these days are administered by what are called volunteer "Accredited Examiners," of which I am one. These are certificated hams that volunteer their services to ISED Canada who are then designated by ISED to conduct their examinations. However, unlike the USA, only one examiner is required to administer such exams. What's more, and once again, unlike in the United States where accredited examiners are affiliated with one or more Volunteer Examiner Coordinators (that, in turn, interface with the FCC) in Canada we deal directly with ISED and can administer our exams at times and places that are mutually convenient for both the examiner and the applicant.

For example, I have administered Canadian exams to applicants around my home's kitchen table, or in a quiet place at the back of restaurants during radio club meetings. In addition (and unlike the USA) examiners are also authorized to negotiate a testing fee with the applicant if we so



Prospective applicants for a Canadian Certificate of Proficiency (or those who wish to obtain one or more additional Canadian call signs) can search an online call sign database for an available call sign. (Courtesy: ISED)

choose. In my own case (and to absolutely avoid even the appearance of impropriety) I simply tell my successful applicants to join and support the Canadian amateur radio club of their choosing.

After the Exam

As Canadian Accredited Examiners deal directly with ISED Canada, the Canadian government has once again made it refreshingly simple to report the results of the examinations we administer. Once an applicant successfully completes their exam(s), we then sit together in front of my computer or laptop and, after entering my accreditation credentials on the ISED web site, I enter the applicant's personal information, mailing address plus their test score(s) into the ISED database along with their email address. That action, in turn, automatically creates an email back to the applicant where they then enter such things as their three choices for initial call sign.

Then, once they reply to the email from ISED and that information is accepted by the system, the application process is essentially complete. I just need to file their completed examination paperwork in my personal file and retain it for at least two years. What's more, as the entire process is automated, it is not unusual for a new applicant's chosen call sign (or upgrade) to show up in the Canadian call sign database rather quickly, sometimes that same evening, or the very next business day. Their actual paper certificate will usually show up in their Canadian mailbox a week or so later. This same process applies to applicants who have taken an exam to upgrade their certificates either by qualifying for a Basic with Honors, Morse code and/or Advanced endorsement.

Multiple Canadian Call Signs

Normally, Canadian hams are initially issued a call sign, with either a VA or VE prefix, along with a number that corresponds to the province of issue, followed by either a three or two letter suffix. However, unlike the USA, we Canadian hams can have one or more call signs assigned to our stations if we wish. While our first call sign assignment is free, subsequent call signs can be obtained from the online Available Canadian Call Sign database by paying a one-time fee (currently CDN $60) to ISED Canada. What's more, and, again, unlike the USA, a so-called vanity call sign (a "two by two") is not based on one's license class. These calls are available by paying the same CDN $60 fee. The only restriction on the assignment of a "two by two" call sign is that the applicant must have been a certified Canadian ham for a minimum of 5 years.

However, as two-by-two call sign availability is so rare (particularly in the more populated provinces of Canada such as Ontario and Quebec) only one such two-by-two call sign will be issued to licensees. But, otherwise, we can essentially have as many two-by-three call signs assigned to our stations as we are willing to pay for.

Soap Box

Having regularly operated under the rules and regulations of both the USA and Canada for our service (as well as serving as an Accredited Examiner in both) I've since concluded that, even a cursory examination of the rules that govern our service in both countries, it is clear to me that they are aimed at two very distinct objectives. As I've noted, in the USA (and at least since the late 1950s) the FCC's Part 97 has been aimed at creating an educated pool of licensees schooled in various aspects of electronics and not just amateur radio. As a result, these are not necessarily knowledge and skills that are needed to operate our stations safely and without interfering with other amateurs or with other radio services.

In fact, in the FCC's preamble to Part 97 they very clearly state (Part 97.1(d)) that one of the basic purposes of our service in the USA is the "Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts." To me, this begs the obvious question: "For whom?"

Indeed, such wording is completely absent from the basis and purpose of our service as stated in either the ITU definition (above) or in their governing regulations. According to the ITU, we are supposed to be interested in radio technique "solely with a personal aim." Could it be those words were put into Part 97 to specifically justify the FCC's invention of incentive licensing back in the 1950s so as to further the (then) US government's push to create such a pool to enact their own political policies of the day?

By contrast, the rules governing our service in Canada are totally devoid of such "creating experts" wording. In essence, with just a few exceptions, ISED Canada has simply implemented the ITU regulations for our service into their own overall radio regulations with specific guidance on how those regulations (testing, operating and constructing our equipment, etc.) are to be implemented in Canada.

Prohibited vs. Enabled

In fact, when comparing and contrasting the rules for our service between our two countries, it has also become quite clear to me that Part 97 is very much a "don't" oriented regulatory scheme. That is, unless something is specifically enabled in Part 97, then it is prohibited. An example of this approach relates to what specific emission modes are authorized in the USA in which part of our ITU-granted frequency spectrum. This is probably why we (via our ARRL) must first ask for—and then be granted—the FCC's permission to operate a new emission mode before we are allowed to do so on our bands.

Conversely, in the Canadian rules, I've found that unless something is specifically prohibited in our operations, (as long as it conforms to the ITU definition and bandwidth rules for our service) then it's enabled. In essence, and once again, because the push to create such "pools of experts" is totally absent from the Canadian rules, the Canadian rules revolve around common sense ideas relating specifically to safety (of ourselves and our neighbors) and non-interference (to other radio amateurs and/or other radio services) in our operations.

US Question Pool Disconnects

Both the USA and Canada test their applicants based on question pools that have been established for each class of license. However, these pools also reflect the differing objectives for our service in our two countries. Again, according to the ITU's definition and rules, ours was always intended to simply be an "amateur" radio service made up of "amateurs" and not an achievement-based, "No budding RF Engineer Left Behind" radio service that, unfortunately, the FCC turned us into in the USA back in the late 1950s and early 1960s.

Or, to put it another way, shouldn't the content and comprehensiveness of our tests for entry and advancement in our service simply match the specific operating privileges they grant? They clearly do this in Canada. But, right now, in the USA, I firmly believe they very clearly don't.

Indeed, these incentives for advancement in the USA seem to have all largely been set up to do little more than entice people into higher learning by stoking their egos… creating a whole series of achievement-based rewards that include gaining so-called "exclusive" access to artificially subdivided frequencies and bandwidth.

On the other hand, in its present form, I contend the examination for our Technician license is clearly not comprehensive enough. It routinely grants high power and "from

scratch" transmitter and amplifier construction privileges to successful applicants who have not (yet) demonstrated they have enough technical knowledge and/or experience to know how to do those things safely without also causing harmful interference to other hams or other services.

For example, US Technicians…after passing a horrifically simple, 35 question exam…are immediately granted the privilege of building and operating a full kilowatt amplifier (from scratch, no less!) for 5.6 GHz. They are then free to aim the antenna for that transmitter at themselves (or their neighbors) at full tilt, thereby possibly causing irreparable eye damage to both!

Extra Class Disconnects

But, in the USA, I contend ours is also a licensing system where the content and comprehensiveness of what's on our Extra Class exam go well beyond what is minimally required by the international radio regulations to provide a reasonable assurance that such license holders will, in fact, operate their stations in a safe manner with the added privileges those licenses specifically grant. That is, many of the questions in the Extra Class question pool have little or nothing to do with the privileges they grant (or have already been granted) to lower class licenses.

For example, the current Extra Class question pool is chock full of questions relating to operating on our amateur radio satellites. Yet, US Technicians can already operate on our fleet of those same satellites with their current license privileges! Shouldn't those questions about satellite operation now be part of the Technician exam rather than the one for Extra Class? And, how does mastering all 600-plus pages of the ARRL's Extra Class License manual to successfully pass that examination directly relate in any way to the additional technical skills required to safely operate one's station at 14.024 MHz vs. 14.026 MHz, or to fill out an application for a so-called "exclusive" call sign?

The Bottom Line

Unfortunately, and as I've already noted, far too many US hams (including yours truly before I moved to Canada and began operating under the Canadian rules for our service) remain blissfully ignorant of the fact that most governments in the rest of the world steadfastly refrained from buying into the FCC's incentive licensing approach for their own amateur services. In fact, throughout the rest of the world, amateur radio licenses are usually (and simply) regarded as "certificates of safety" and/or "licenses to learn," much like the written test one takes to obtain a license to operate a private motor vehicle or to fly a private aircraft.

That is, most other country's amateur licensing systems (including that in Canada) are specifically designed to be just comprehensive enough to do nothing more than provide a reasonable assurance to government regulators that an applicant for an amateur radio license won't become a safety hazard or a nuisance to his or her self (or their neighbors) or become a nuisance to others on the ham bands (or to other radio services).

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E1D07 (A) [97.207]
Which HF amateur bands have frequencies authorized for space stations?
A. Only the 40, 20, 17, 15, 12, and 10 meter bands
B. Only the 40, 20, 17, 15, and 10 meter bands
C. Only the 40, 30, 20, 15, 12, and 10 meter bands
D. All HF bands
~~


E1D08 (D) [97.207]
Which VHF amateur bands have frequencies authorized for space stations?
A. 6 meters and 2 meters
B. 6 meters, 2 meters, and 1.25 meters
C. 2 meters and 1.25 meters
D. 2 meters
~~


E1D09 (B) [97.207]
Which UHF amateur bands have frequencies authorized for space stations?
A. 70 cm only
B. 70 cm and 13 cm
C. 70 cm and 33 cm
D. 33 cm and 13 cm
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These questions (from the current US Extra Class question pool) relate to satellite operating. However, US Technicians can already operate on our satellites with their Technician Class privileges. Shouldn't these questions be in the Technician Class question pool rather than the question pool for the Extra Class license? (Courtesy: ARRL)

Now, granted, in Canada, the question pool for their Advanced (highest) class certification contains highly technical questions. But, with a very few exceptions, they all relate directly to "from scratch" transmitter, transceiver, linear amplifier and/or in-band repeater construction and operation…privileges that are exclusively reserved for Canadian Advanced Certificate holders (**https://ised-isde.canada.ca/site/amateur-radio-operator-certificate-services/en/amateur-radio-exam-generator/print-all-advanced-questions**).

The Future of US Licensing?

Based on their regulatory actions in our service in the USA over the last 30 years (including their decision to drop all forms of Morse testing), it's also become absolutely clear to me that the FCC has (finally!) recognized the mess their predecessors made of our licensing and regulatory system in the United States when they first hatched their "license-class-and-operating-mode-based" foolishness back in the 1950s and 1960s. And, as a direct result of that realization, I also firmly believe the FCC (with the ARRL's behind-the-scenes tacit approval) has now embarked on a long-term plan that will largely deregulate our service, thus allowing it to revert back to the time when our licensing system (like most others in the world) was aimed primarily at insuring non-interference and the safety of its operators (and their neighbors)… and nothing more.

TSM